GOVERNMENT OF INDIA
MINES
LOK SABHA

UNSTARRED QUESTION NO:1413
ANSWERED ON:27.11.2007
STUDY ON LANDSLIDES AND AVALANCHES
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Will the Minister of MINES be pleased to state:

(a) whether the Geological Survey of India (GSI) has carried out any study with regard to landslides, snow avalanches, etc. in the country;

(b) if so, the details thereof, State-wise;

(c) the details of methodology used in carrying out the survey;

(d) whether the GSI has identified the most landslide, snow avalanche-prone areas in the country;

(e) if so, the details thereof, State-wise; and

(f) the steps taken/proposed to be taken by the Government to prevent occurrence of such incidents and reduce the damage to life and property?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF MINES (DR. T. SUBBARAMI REDDY)

(a) to (c) : Geological Survey of India (GSI) is engaged in study of landslides and is carrying out three types of landslide investigations namely landslide hazard zonation (LHZ) on different scales, landslide inventory and site-specific study of landslide. LHZ is done following Bureau of Indian Standard (BIS) or modified BIS guidelines. Different type of investigation done by GSI is given below, state-wise:

LHZ on Macro Scale (1:50,000/25,000) : Tamil Nadu, Himachal Pradesh, Jammu and Kashmir, Uttarakhand, West Bengal, Sikkim, Mizoram, Arunachal Pradesh, Assam and Meghalaya.

LHZ on Meso scale (1:10,000/5,000) : West Bengal, Sikkim, Uttarakhand, Jammu and Kashmir and Mizoram.

Landslide Inventory : Uttarakhand, Himachal Pradesh, Jammu and Kashmir, Sikkim, Arunachal Pradesh, Assam, Manipur, Meghalaya, Nagaland, Mizoram, Tamil Nadu, Kerala, Karnataka, Goa, Maharashtra, Madhya Pradesh, Andhra Pradesh, Pondicherry and Tripura.

Site specific studies on landslide in all the states are undertaken as and when requested by the State Governments and Road Maintaining Authoriteis.

Studies for snow avalanches for few site specific areas based on the request from the local authorities has been carried out by GSI. As per Ministry of Defence, Snow Avalanche Study Establishment (SASE) identifies avalanche prone areas and registers such sites.

(d) to (e) : The entire Himalayan mountainous region, Northeastern part of India, Western Ghats and Nilgiri Hills are the most landslide prone areas of the country. The landslide affected states are Uttarakhand, Himachal Pradesh, Jammu and Kashmir, Maharashtra, Madhya Pradesh, West Bengal, Sikkim, Goa, Karnataka, Mizoram, Assam, Nagaland, Arunachal Pradesh, Manipur, Tripura, Tamil Nadu, Kerala, Orissa, Andhra Pradesh, Meghalaya and Pondicherry.

(f) : National Disaster Management Authority (NDMA) has been constituted by the Government of India in 2005 to address the issue of mitigation of all types of natural disasters. GSI, declared as the Nodal Agency by the Government of India for any types of landslide study of the country, has already undertaken awareness generation programme not only for the State Government officials engaged in landslide hazard mitigation tasks but also for the affected communities living in the landslide prone hilly terrains.

Avalanche forecast bulletins for Area of Responsibility (AOR) are issued 36 hrs advance throughout the winter season by SASE/Defence Research Development Organisation (DRDO) assisted by Indian Meteorological Department. Remote Sensing Technology is being operationalised in view of large areas to be covered in AOR.